



Deer Repellent Available

The Pine SWCD office in Hinckley has Plant-sykdd Deer Repellent available. Spring is a good time to apply the repellent to your trees and plants, and it is proven effective for up to six months. We have done a lot of checking with other districts and natural resource professionals, and this product comes highly recommended. We sold it for the first time last spring at our tree program and we are anxious to hear about the results. A quart of the spray covers 100 trees roughly 1 ft. tall. If you are interested in Plantskydd, please stop by our office at call us or 320-384-7431. Also, if you have successes or failures with Plantskydd, we'd like to hear about those too.

Tree Species	Soil Types				Light Requirements				Moisture Reqrmnts	Mature Height (in feet)	Crown Spread (in feet)	Growth Rate			Animal Use			Good for Windbreaks	Human Use (Jellies, etc)	Wildlife Food Supply			Disease Resistant	Short Lived	Could be Good for Shoreline		
	Sandy	Silt	Loam	Clay	Full Sun	Sun-Pt Shade	Shade-Pt Sun	Full Shade				Very Fast	Moderate	Slow	Birds	Sm Mammals	Lg Animals			Summer	Fall	Winter					
Cranberry		X	X	X	X	X		Moist/W.D.	6-15	15		X	X	X	X	X		X	X	X				X			X
Redosier Dogwood		X	X	X	X		X	M.W.	7-10	8-12		X		X	X	X	X	X					X	X			X
False Indigo	X	X	X	X	X			W.D.	6-12	12-20	X				X	X	X					X	X			X	X
Hazelnut, American		X	X	X	X	X	X	Moist-W.D.	6-12	6-12		X			X	X	X	X	X				X				
Lilac				X	X			M.D.R.	20	15						X	X										
Nanking Cherry	X		X	X		X	X	Moist-W.D.	6-10	15	X				X	X	X		X			X	X			X	
Rugosa Rose						X		D.R.	3-6	10					X	X			X					X	X		X
Sumac, Staghorn	X	X	X	X				W.D.	12-25	12-20	X					X	X					X	X				

American Plum	X	X	X		X			W.D.	15-25	8-25		X		X	X	X	X	X	X	X							X
Chokecherry, Common			X	X		X		D.R. - W.D.	30	20	X			X	X	X	X	X	X	X							
Flame Willow	X	X	X	X	X		X	Moist-W.D.	20	15-20	X								X	X				X	X		
Flowering Crab		X	X		X			W.D.	20-30	20				X					X				X	X			
Mountain Ash			X		X			Moist-W.D.	15-30	15-25		X		X								X	X		X		
Nannyberry	X	X	X	X		X		Moist	8-25	6-10	X			X	X			X				X	X				

Black Walnut				X	X			Moist-W.D.	70-90	60-100	X			X	X	X		X	X	X			X	X	X	X	
Butternut			X	X	X			Moist-W.D.	40-60	50-60	X			X	X	X	X	X	X			X	X	X	X		
Green Ash				X	X	X		W.V.-D.R.	50-75	30-50	X			X	X	X		X								X	
White Ash		X	X		X			Moist-W.D.	50-80	50-75		X		X	X	X		X									
Hackberry		X	X		X			W.V.-W.D.	40-60	35-50	X	X		X	X	X		X				X	X	X		X	
Hybrid Poplar		X	X		X			Moist	40-90	30-40	X				X	X								X	X		
Paper Birch	X		X	X		X		Moist-W.D.	40-60	30-50	X			X	X	X	X	X	X	X			X	X	X		X
Red Maple	X		X	X				W.V.-W.D.	50-70	40-60	X			X	X	X	X	X	X	X							X
Sugar Maple			X					Mod-W.D.	60-100	60-80		X		X	X	X				X			X	X	X		
Red Oak				X		X		Moist-W.D.	75-100	40-50	X			X	X	X	X	X				X	X	X			
Bur Oak	X	X	X	X	X			W.V.	50-80	75-100			X	X	X							X					X

White Cedar			X	X				Moist-W.D.	40-70	10-20			X	X	X	X	X						X	X	X		
Red Cedar	X			X				W.V.	25-60	10-20				X	X	X	X	X	X				X	X			
Black Spruce			X					Moist-W.D.	30-70	15-30						X		X								X	
Norway Spruce			X	X	X	X		Moist-W.D.	75-100	20-35	X				X	X	X	X	X	X						X	
White Spruce	X		X	X	X			Moist-W.D.	50-80	20-30			X	X	X	X	X	X	X	X							
Balsam Fir	X	X	X					Moist-W.D.	50-75	20-30			X	X	X	X	X	X						X			
Tamarack			X					W.D.	30-50	30-35		X		X											X		
Red Pine	X				X			Moist-W.D.	70-80	20-40		X		X	X	X	X	X	X				X	X			X
White Pine			X	X		X		W.V. - W.D.	60-100	50-80	X			X	X	X	X	X	X	X							X

D.R. Drought Resistant	M.D.R. Moist-to-Drought Resistant				W.V. Wide Variety				W.D. Well Drained				M.W. Moderately Wet			
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Re-Registration Under Way for 32,000 Feedlots

Re-registration currently is under way for nearly 32,000 livestock feedlots in Minnesota. The initial registration took place in January 2002. Feedlot owners are required to register their feedlot once every four years.

In the 54 counties delegated to administer the state's feedlot rule, the county conducted re-registration for a majority of feedlots. In other counties, feedlot owners must submit the updates to their Minnesota Pollution Control Agency (MPCA) regional office. Re-registration forms have been mailed to feedlot owners in these non-delegated counties. They are due Jan. 1, 2006.

Registration requires owners of feedlots or manure storage areas to provide general information about their operation, such as name and address, facility location, type of operation, number of

animal units and distance to surface water. It is designed to facilitate regulation without requiring detailed operating permits for smaller feedlots under 300 animal units.

"Under the old rule, nearly all feedlots were required to have a permit. Now most only need to register, but still must comply with laws and rules to protect water quality," says Wayne Anderson, MPCA agriculture liaison. "This allows us to focus on priorities while reducing paperwork both for producers and the agency."

"The overall response to feedlot registration since 2002 has been positive," says Bob Finley, manager of the MPCA feedlot program. "Keeping information on Minnesota's feedlots up-to-date is important for operating an effective program, and counties have been a great help in this effort."

Registration is required for feedlots:

- Capable of holding 50 or more animal units, or a manure storage area capable of holding the manure produced by 50 or more animal units. (Animal units are a unit of measure used to compare differences in the production of animal manure. For example, one mature dairy cow weighing more than 1,000 pounds is 1.4 animal units, one beef stock cow is 1.0 animal units, one market swine under 300 pounds is 0.3 animal units, and one turkey over 5 pounds is 0.018 animal units.)

- Capable of holding 10 or more animal units, or a manure storage area capable of holding the manure produced by 10 or more animal units located within shoreland. (Shoreland refers to land that is 1,000 feet or less from a lake or 300 feet or less from a river or stream. Some ponds, wetlands

and altered watercourses may also be classified as shoreland. County and city zoning ordinances contain a specific list of waters that have a shoreland designation.)

-- Registration is not required for pasture-only operations; however, pasture operations with a feedlot component must register the feedlot portion of the operation. For further information regarding feedlots within pasture operations, contact the MPCA or a delegated county feedlot officer.

If you have any questions about completing the Feedlot Registration Update Form or the requirement to update your current feedlot registration, please contact Lisa Scheirer at 218-846-0498 or 1-800-657-3864. For more information about the feedlot rule, visit the MPCA Web site at www.pca.state.mn.us/hot/feedlots.

Land use planning is an intensive process

By Timothy J. Houle, Morrison County Administrator

I like to say that land use planning is the only sport in which the referee gets punched. That's all we're really supposed to be doing – being the referee. I thought my pinstripes kind of look like zebra stripes, but apparently not enough. Land use planning is designed to be this process whereby local government, working in cooperation with an engaged citizenry, plan together what the community will look like in the future. Zoning then, is the implementation of that community plan.

Another way of looking at it is that your Comprehensive Plan, the community's plan, is what your county looks like from 50,000 feet up in an airplane. Each zoning decision is the equivalent of your view when you're standing on the tarmac. Needless to say, when you're standing on the tarmac, you can't see what hazards and risks lie just over the next ridge, so you better have paid close attention to them when you were looking at 50,000 feet. The importance of the Comprehensive Plan, especially your community's acceptance of it, is essential to minimize zoning conflicts.

I'm sure I don't even need to persuade you that zoning is something you're going to tear your hair out over. But just in case, consider that MCIT defends more cases by far for

Submitted by Pine County Zoning

This article first appeared in the October 2005 issue of "Minnesota Counties" and has been reprinted here with permission of the author Timothy Houle, Morrison County Administrator, for two reasons. First, to share that land use planning is a difficult task for all local governments, but a necessary process to manage growth and development. Secondly, the parallels between Morrison County and Pine County are significant. Both are rural, central Minnesota counties, essentially equal in geography, in number of townships and cities, both located on a major north-south transportation route, and proximity to a growing metro area. Land use planning is an opportunity to engage citizens and tackle the difficult issues of environmental management, growth and development, and coordination of land management among all local governments.

zoning issues that any other type of case. Consider the experience of Pope County, which is only the most recently reported in the press (Star Tribune, August 17, 2005), in which they prevailed upon one of their own constituents to move most of his house. We in Morrison County have done the same. Consider also the recent Supreme Court ruling in *Keelo v. New London*, which gives us the authority though not necessarily the legitimacy to take land for redevelopment purposes. The point is that we simply cannot govern

TOP TEN REASONS TO DEVELOP AND IMPLEMENT A COMPREHENSIVE PLAN

- Provides legal justification for a community's land use decisions and ordinances
- Creates the opportunity for residents to guide a community's future
- Helps a community identify issues, stay ahead of trends and accommodate change
- Offers a process for joint problem-solving and leveraging scarce resources among neighboring jurisdictions
- Protects and makes the most of public investments
- Helps ensure that growth makes the community better, not just bigger
- Fosters sustainable economic development
- Helps a community maintain its resource base and other 'natural capital'
- Protects property rights and property values
- Provides an opportunity to consider future impacts of today's decisions.

without the consent of the governed, as the predicted backlash from *Keelo v. New London* may soon show.

So how do you get the consent of the governed? The truth is that our citizenry is not all that engaged. At least not until we tell them they have to move their house; then they are definitely engaged! This is a very reactive form of citizen engagement and we need the more proactive forms of citizen engagement of the type that can help us draft a compre-

hensive plan supported by the community. It goes without saying that the traditional method of a formal public hearing simply does not cut it. We need to reach out to engage citizens where they live. By that, I mean we cannot expect them to come to us, we need to go to the places where they have already chosen to gather and engage them there.

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Septic System Care Workshop Planning...

By Valerie Prax,
Regional Extension Educator, Water
Resource Management and Policy

Are you a home or cabin owner? Are you interested in saving money? Would you like to protect your family's health? Are you interested in protecting our natural environment?

Do you have a septic system?

A 2-hour program for homeowners will be held in Pine City on Tuesday, May 2, 7:00 – 9:00 p.m., City Hall (300 5th St. SE, by the Water Towner and Fire Hall)

There is no charge for this workshop, which includes a copy of the Septic System Owner's Guide. Funding for this program is provided by a grant from the Pine County Commissioners to the Pine County

Extension Service.

Presenter for this program is Valerie Prax, Regional Extension Educator, Wastewater Treatment Systems, Mora Extension Regional Center. To register, call the University of Minnesota Extension Regional Center, Mora, 320-225-5050 ext. 9 (registration preferred, not required – we want to be sure to have enough materials).

Homeowners interested in better understanding, operating and maintaining their septic systems will want to attend this Septic System Care program presented by the University of Minnesota Extension Service.

Get these questions and more answered:

How often should my septic tank be cleaned?

How can I make my system last

longer?

Should I use additives to clean my tank or keep it working?

How can I save money?

Is it better to do all my laundry at once, or spread it out over the week?

Should I be using liquid or powdered laundry detergents?

How can I help prevent my system from freezing next winter?

How does my system work?

Improper design, construction, operation and maintenance of home septic systems can lead to elevated levels of fecal coliform bacteria and nitrates; this can end up in your well water. Attend this session to learn how to maintain your system.

For more information, call 888-241-4528 ext. 3 or 320-225-5054 or email malmq002@umn.edu

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Many counties have tried very creative things in this regard: visioning sessions, special topic forums, cluster township officer meetings, attending civic club meetings, church group meetings, and so on. In Morrison County, we did these things and we also titled our Comprehensive Plan involvement process "No...I'm sorry, but you can't do that with your land." The point isn't that one size will fit all or that ours is better than yours. The point is that each of us knows how to engage your citizens, you just need to sit down and think about the process of engagement before you worry about the outcomes in the plan. And you need to treat this part of planning your process as being as important as the outcomes because ultimately the outcomes are only as good as the citizen support for them. In our recent update of the Comprehensive Plan, we managed to personally engage over 750 people and surveyed another 1200 more through our different outreach strategies compared to the five or so that we would likely have otherwise gotten.

Actively engaged citizens in public involvement processes is time-consuming and painstaking work, whether it's related to land use planning, meth reduction efforts, or any other public policy topic. It is also terribly rewarding to know that so many people are interested in helping but they just needed to be reached in a way that is more convenient for them. You will not get 50% of your citizens to come out no matter what the strategy, but we can do better than the normal turnout of five. The more we listen, the less likely the referee gets punched. And when you listen, when you listen really carefully, you just might find out what it will take to get the consent of the governed. When you hit that sweet spot, you'll know it. Just keep in mind, it changes...

Managing Wastewater in Pine County

By Valerie Prax,
Water Resource Management and
Policy

How do people in your neighborhood manage wastewater? Do you pump your septic tank regularly and inspect your drainfield? Or do you simply flush and watch it "go away?" What happens underground in your septic system? Do you know it is properly treating your wastewater? What happens when there is no longer enough room on your property to expand or replace your system, and still have room for a well?

Are you interested in hearing how property owners on lakes and small unsewered communities in northern Pine County can work together to develop plans to solve wastewater issues as a community and manage septic systems? There will be a meeting at the YMCA Camp Miller, Sturgeon Lake on Saturday, May 20, 1:00 – 4:00 p.m. All lake associations and small communities are encouraged to invite 3 – 5 property owners to attend. Funding for this program is provided by a grant from the Pine County Commissioners to the Pine County Extension Service. There

will be no charge for this program. To register or for more information, call 888-241-4528 ext. 3 or email at malmq002@umn.edu.

Valerie Prax, Regional Extension Educator, University of Minnesota Extension Service will discuss options for lakes and communities, how to begin the process and work together as a community, management options, a brief description of how septic systems work, and issues related to septic systems in our area. What options do we have for improving wastewater treatment in our area?

When a community faces wastewater treatment issues, a successful outcome is often more dependent on the process the community follows to address the issue than it is on the wastewater treatment technologies available to them. Engaging all of the members of the community early in the decision-making process leads to the best solutions and encourages responsibility. Finding appropriate technological solutions to a community's wastewater problems is the easy part. Working together as a community is the challenge.

Wastewater treatment protects human and environmental health. There has been much debate over the best way to treat wastewater. Only in the last few years has the Environmental Protection Agency (EPA) acknowledged that decentralized systems (individual and small multiple-household systems, sometimes called on-site septic systems) are as successful as municipal or centralized systems in treating wastewater to meet water quality standards in a cost-effective manner.

Everyone generates wastewater. The typical home uses 50 to 100 gallons of water per person per day in the bathroom, kitchen and laundry room. When people "use" water it doesn't go away; it becomes dirty and is wastewater or sewage. Wastewater contains pathogens (disease organisms), nutrients (nitrogen, phosphorus, etc.), solids (organic, inorganic), chemicals (cleaners, disinfectants, medications) and water. Wastewater must be cleaned up before it is returned to the environment to be reused; destroying the pathogens, and removing as much phosphorus and nitrogen as possible.

WetlandUpdate

1991 Wetland Conservation Act
By Robin Poppe, Wetland Specialist

AFTER-THE-FACT APPLICATION FEES

The Pine Soil and Water Conservation District implemented a fee schedule in 2004 to cover expenses associated with wetland applications and site review. Occasionally projects impacting wetlands are constructed without authorization. Typically unauthorized wetland impact will have to be rectified. The wetland impacted by the project will have to be restored to pre-altered condition. An order will be issued by the Department of Natural Resources requiring that the wetland be restored. Upon receipt of a restoration order the landowner has the option of submitting an after-the-fact application for wetland replacement or an exemption. The after-the-fact application must be submitted to

the Pine Soil and Water Conservation District. As of January 24, 2006, the fee for an after-the-fact application is now double the rate of the fee required for an application submitted prior to wetland impact.

Fee for an after-the-fact application for replacement or an exemption for single site development is \$50.

Fee for an after-the-fact application for replacement for commercial development is \$550.00.

Fee for an after-the-fact application for an exemption for commercial development is \$50.00.

Submitting applications prior to wetland impact is less costly. Additionally, agency evaluation as to whether the project will be authorized requires less time. If you think your project might impact a wetland please contact us for an application. Minnesota Rules, Chapter 8420.0290 Enforcement Procedures, Sub. 3 stipulates that wetlands impacted without prior authorization will be required to be restored unless extenuating circumstances exist that will allow wetland replacement.

DE MINIMUS EXEMPTIONS WITHIN SHORELAND AREAS

The de minimis exemption within shoreland protection zones will be administered to be consistent with the objectives of the Pine County Comprehensive Local Water Plan. The Water Plan's objective is to protect, manage and improve water and related land resources. Retaining wetlands in shoreland areas is crucial for water quality which affects recreation, fisheries, wildlife and esthetics. The de minimis exemption will assist in preserving wetlands in the shoreland area of lakes, rivers and streams. The shoreland protection zone for a lake is 1000 feet from the ordinary high water level. The shoreland protection zone for a river or stream is 300 feet from the ordinary high water level.

If at all possible, wetland impacts especially in shoreland areas should be avoided. But if this is not an

option, the de minimis exemption can be applied to any type of project and any type of wetland impact. Wetland impact consists of filling, excavation, draining, grading or grubbing a wetland. The de minimis exemption will allow 400 square feet of impact to wetlands within the shoreland protection zone regardless of the type of wetland. The exemption can be utilized only one time. Once the de minimis exemption is applied to a parcel the exemption can not be used again. If the parcel changes ownership the new owner is not eligible to use the de minimis exemption if it has already been used. If a project requires more than 400 square feet of wetland impact, wetland replacement will be required if the project is authorized.

If you have a project that will or might impact a wetland, please contact our office for an application. We encourage you to try to avoid all wetland impact, especially wetlands in shoreland areas. Shoreland wetlands are protecting and preserving the water quality of YOUR lake, river or stream.

Sewer Funds May Be Available

Virtually all rural homeowners have an on-site septic system. Many were installed decades ago, under all the rules of that time but may not be functioning properly today. As sewer use changes in the home (more people using more water) the old septic system gets a little strained, leading many homeowners to want to upgrade their systems but they find that it can be expensive.

In addition to standard home improvement loans from a bank or other lending institutions, several state and federal programs exist which may be able to offer loan funds for sewer improvements for your specific situation including:

Agricultural Best Management Practices loans for septic systems:

Available for rural landowners, 10 year loan repayment, 3% interest rate to be used to upgrade existing septic systems, contact the Pine County Soil and Water Conservation District (320) 384-7431.

USDA Rural Development Home Improvement Grant and Loan Program

USDA has financing available for homes in need of repair, including septic system replacement and repair;

Contact the USDA in Duluth (218) 720-5330, ext. 4 for more information.

Lakes and Pines Home Rehabilitation and Revolving Loans

Low interest loans for septic system installation and repairs may be available through Lakes and Pines to low income homeowners;

Contact Lakes and Pines Community Action Council in Mora at (320) 679-1800; 1-800-832-6082.

Soil Testing Kits Available

You can pick up a soil testing kit at the USDA Service Center in Hinckley (260 Morris Ave No). You can have your soil tested for potassium, pH, salts, lead, sulfur, nitrates, boron, calcium/magnesium, organic matter, iron, zinc, copper, manganese, and phosphorous. After you've picked up your kit, you will put a sample of your soil in the soil bag provided, fill out the necessary form for either Lawn & Garden or Crops, and enclose your check to the University of Minnesota for the proper amount.